AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the present application.

IN THE CLAIMS:

1-40. (Canceled)

41. (Withdrawn) A medicine useful for treatment or improvement of a corneal epithelial damage, which is obtained, selected or evaluated by the method of claim 27.

42. (Withdrawn) A medicine useful for treatment or improvement of a corneal epithelial damage, which is obtained, selected or evaluated by the method of claim 38.

43. (Canceled).

44. (Currently Amended) An experimental animal having corneal epithelial damage in a part of the ocular cornea or in the pupil area of the ocular cornea, wherein said experimental animal is a non-human mammal or a fowl, wherein said corneal epithelial damage is caused by contacting ~~the whole area of the ocular cornea~~

~~or~~ a part ~~thereof,~~ or a pupil area of the ocular cornea of said animal with at least one water-absorbing material selected from the group consisting of a polyol, an amino acid, a peptide and a water-soluble polymer, said water-absorbing material being used in the physical state of powder, gel, jelly or tablet, and thereby generating a difference in osmotic pressure between the inside and outside of the ocular corneal epithelium cells.

45. (Previously Presented) The experimental animal claimed in Claim 44, wherein said mammal is rabbit.

46. (Previously Presented) The experimental animal claimed in Claim 44, wherein said water-absorbing material is a saccharide.

47. (Previously Presented) The experimental animal claimed in Claim 44, wherein said water-absorbing material is at least one saccharide selected from the group consisting of glucose, maltose, sucrose, fructose, dextran and starch.

48. (Canceled).

49. (Previously Presented) An experimental animal having corneal epithelial damage, wherein said experimental animal is a non-human mammal or a fowl, wherein said corneal epithelial damage is caused by covering the ocular cornea of said animal with a water-impermeable membrane or film having a hole or holes in it, said membrane or film being placed on the ocular cornea so that the hole or holes in the membrane or film comes on around the pupil area thereof, contacting the whole area of the ocular cornea or a part thereof, or a pupil area of the ocular cornea of said animal with a water-absorbing material through said hole or holes of the membrane or film and thereby generating a difference in osmotic pressure between the inside and outside of the ocular corneal epithelium cells.

50. (Previously Presented) The experimental animal claimed in Claim 49, wherein said mammal is rabbit.

51. (Previously Presented) The experimental animal claimed in Claim 49, wherein said water-absorbing material is at least one of materials selected from the group consisting of a polyol, a salt, an amino acid, a peptide and a water-soluble polymer.

52. (Previously Presented) The experimental animal claimed in Claim 49, wherein said water-absorbing material is at least one of materials selected from the group consisting of a saccharide, an alkali metal salt and an alkali earth metal salt.

53. (Previously Presented) The experimental animal claimed in Claim 49, wherein said water-absorbing material is at least one saccharide selected from the group consisting of glucose, maltose, sucrose, fructose, dextran and starch.

54. (Previously Presented) The experimental animal claimed in Claim 49, wherein said water-absorbing material is used in the physical state selected from powder, solution, gel, jelly or tablet.

55. (Currently Amended) An experimental animal having corneal epithelial damage <u>in a part of the ocular cornea or in the pupil area of the ocular cornea</u>, wherein said experimental animal is a non-human mammal or a fowl, wherein said corneal epithelial damage is caused by contacting a part or a pupil area of the ocular cornea of said animal with at least one water-absorbing material selected from the group consisting of a polyol, an amino acid, a peptide and a water-soluble polymer, said water absorbing

material being used in the physical state of powder, gel, jelly or tablet, through a water-permeable or semi-permeable membrane or film and thereby generating a difference in osmotic pressure between the inside and outside of the ocular corneal epithelium cells.

56. (Previously Presented) The experimental animal claimed in Claim 55, wherein said mammal is rabbit.

57. (Canceled).

58. (Previously Presented) The experimental animal claimed in Claim 55, wherein said water-absorbing material is a saccharide.

59. (Previously Presented) The experimental animal claimed in Claim 55, wherein said water-absorbing material is at least one saccharide selected from the group consisting of glucose, maltose, sucrose, fructose, dextran and starch.

60. (Canceled).

61. (Previously Presented) The experimental animal claimed in Claim 44, wherein said animal can be used as a dry eye model.

62. (Previously Presented) The experimental animal claimed in Claim 49, wherein said animal can be used as a dry eye model.

63. (Previously Presented) The experimental animal claimed in Claim 55, wherein said animal can be used as a dry eye model.

64. (Previously Presented) A method of screening or evaluating a medicine for treatment or improvement of a corneal epithelial damage, which comprises the steps of:

(i) administering a medicine to a damaged ocular cornea of the experimental animal claimed in Claim 44; and

(ii) evaluating the therapeutic effect thereof on the corneal epithelial damage.

65. (Previously Presented) A method of screening or evaluating a medicine for treatment or improvement of a corneal epithelial damage, which comprises the steps of:

(i) administering a medicine to a damaged ocular cornea of the experimental animal claimed in Claim 49; and

(ii) evaluating the therapeutic effect thereof on the corneal epithelial damage.

66. (Previously Presented) A method of screening or evaluating a medicine for treatment or improvement of a corneal epithelial damage, which comprises the steps of.

(i) administering a medicine to a damaged ocular cornea of the experimental animal claimed in Claim 55; and

(ii) evaluating the therapeutic effect thereof on the corneal epithelial damage.

67. (Previously Presented) The method claimed in Claim 64, wherein said step (ii) comprises the steps of:

staining a damaged area of the ocular corneal epithelium either

(a) after administration of the medicine or

(b) before and after administration of the medicine; and

determining change in the stained area of the ocular corneal epithelium.

68. (Previously Presented) The method claimed in Claim 65, wherein said step (ii) comprises the steps of:

staining a damaged area of the ocular corneal epithelium either

(a) after administration of the medicine or

(b) before and after administration of the medicine; and determining change in the stained area of the ocular corneal epithelium.

69. (Previously Presented) The method claimed in Claim 66, wherein said step (ii) comprises the steps of:

staining a damaged area of the ocular corneal epithelium either

(a) after administration of the medicine or

(b) before and after administration of the medicine; and determining change in the stained area of the ocular corneal epithelium.

70. (Canceled).

71. (Previously Presented) A method of producing an experimental animal having corneal epithelial damage, wherein said experimental animal is a non-human mammal or a fowl, comprising the steps of:

covering the ocular cornea of said animal with a water-impermeable membrane or film having a hole or holes in it, said membrane or film being placed on the ocular cornea so that the hole or holes in the membrane or film comes on around the pupil area thereof, and contacting the whole area of the ocular cornea

or a part thereof, or a pupil area of the ocular cornea of said animal with a water-absorbing material through said hole or holes of the membrane or film and thereby generating a difference in osmotic pressure between the inside and outside of the ocular corneal epithelium cells, wherein said difference in osmotic pressure produces corneal epithelial damage.

72. (Previously Presented) A method of producing an experimental animal having corneal epithelial damage, wherein said experimental animal is a non-human mammal or a fowl, comprising the step of contacting the whole area of the ocular cornea or a part thereof, or a pupil area of the ocular cornea of said animal with a water-absorbing material through a water-permeable or semi-permeable membrane or film and thereby generating a difference in osmotic pressure between the inside and outside of the ocular corneal epithelium cells, wherein said difference in osmotic pressure produces corneal epithelial damage.

73. (Previously Presented) A method of producing an experimental animal having corneal epithelial damage, wherein said experimental animal is a non-human mammal or a fowl, comprising the step of:

contacting a part or a pupil area of the ocular cornea of said animal with at least one water-absorbing material selected from the group consisting of a polyol, an amino acid, a peptide and a water-soluble polymer, said water-absorbing material being used in the physical state of powder, gel, jelly or tablet, and thereby generating a difference in osmotic pressure between the inside and outside of the ocular corneal epithelium cells, wherein said difference in osmotic pressure produces corneal epithelial damage.

74. (Previously Presented) The method claimed in Claim 73, wherein said water-absorbing material is at least one saccharide selected from the group consisting of glucose, maltose, sucrose, fructose, dextran and starch.

75. (Previously Presented) The method claimed in Claim 73, wherein said animal is a rabbit.